

FIBER OPTIC TRANSCEIVER ARRAY AND FIBER OPTIC TRANSCEIVER CHANNEL FOR SHORT WAVE FIBER OPTIC COMMUNICATIONS

Abstract of the Disclosure

5 A fiber optic transceiver array and a fiber optic transceiver channel are provided for short wave fiber optic communications. A fiber optic transceiver array for short wave fiber optic communications includes a series of fiber optic transceiver channels. Each fiber optic transceiver channel includes a plurality of test pads. A power distribution bypass capacitor is distributed along the series of fiber optic transceiver channels. A plurality of high voltage power supply and ground connections are coupled through the power distribution bypass capacitor and distributed around the series of fiber optic transceiver channels. A threaded high voltage power supply connection is provided to alternating ones of the series of fiber optic transceiver channels. A threaded ground connection is provided to alternating other ones of the series of fiber optic transceiver channels to reduce power noise generation and susceptibility to noise between adjacent channels. A power to ground decoupling capacitor included with each fiber optic transceiver channel also enhances power noise sensitivity reduction. A fiber optic transceiver channel for short wave fiber optic communications includes at least a high voltage power supply connection and a ground connection. A plurality of test pads includes at least a ground connection and a pair of differential output connections. A channel decoupling capacitor is positioned proximate to the pair of differential output connections.

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